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Memorandum

M8141-SLF-05-041

To: S. J. Trent A0-21 Date: January 19, 2005

From: S. L. Fitzgerald, Manager
WSCF Analytical Chemistry

cc: w/Attachments w/o Attachments
T. F. Dale S3-28 D. J. Hart S3-30
H. K. Meznarich S3-30 M. A. Neely S3-30
P. D. Mix S3-30 H. S. Rich S3-28
J. E. Trechter S3-30 L. C. Swanson E6-35
File/LB

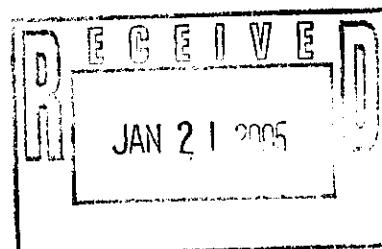
Subject: FINAL RESULTS FOR 200-MW-1 CHARACTERIZATION SAMPLING AND ANALYSIS -
SOIL - SAMPLE DELIVERY GROUP WSCF20042399 - SAF NUMBER F04-015

Reference: (1) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEM-001,
October 31, 2002
(2) HNF-SD-CD-QAPP-017, Rev. 6, Waste Sampling & Characterization Facility Quality
Assurance Plan

This letter contains a narrative (Attachment 1) for sample delivery group WSCF20042399, the analytical results (Attachment 2), and the sample receipt information (Attachment 3).

SLF/grf

Attachments 3



M8141-SLF-05-041

ATTACHMENT 1

NARRATIVE

Consisting of 7 pages
Including cover page

Sample Delivery Group	WSCF20042399
Sample Matrix	Soil
Sample Visual	N/A
SAF Number	F04-015
Data Deliverable	Summary Report

Introduction

One (1) 200-MW-1 Characterization Sampling and Analysis – Soil, 35' – 37.5', sample (B19942) was received at the WSCF Laboratory on December 13, 2004. The sample was analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter.

The narrative (Attachment 1) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 2) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information. Copies of the Chain of Custody and Request for Sample Analysis forms are included as Attachment 3.

Analytical Methodology for Requested Analyses

Inorganic

- Anions by EPA Method 300. Analytical work was performed with no deviations to the approved method.
- Cyanide by EPA Method 335.2. Analytical work was performed with no deviations to the approved method.
- ICP-MS Metals by EPA Method 200.8. Analytical work was performed with no deviations to the approved method.
- Percent Solids by EPA Method 160.3. Analytical work was performed with no deviations to the approved method.
- pH by EPA Method 9045C. Analytical work was performed with no deviations to the approved method.

Organic

- VOA by EPA Method 8260A. Analytical work was performed with no deviations to the approved method.

- PCB by EPA Method 8082. Analytical work was performed with no deviations to the approved method.
- Semi-VOA by EPA Method 8270C. Analytical work was performed with no deviations to the approved method.
- TPH Diesel/Gas Range by WDOE Method NWTPH-Dx/Gx. Analytical work was performed with no deviations to the approved method.

Radiochemistry

- All RadChem analyses (AEA (Plutonium, Americium and Uranium), GEA, Sr-89/90) were run by internal WDOE accredited WSCF procedures. Analytical work was performed with no deviations to the approved method.

Inorganic Comments

Anions – The Nitrite and Nitrate hold times for this analysis were not met. A Blank, Laboratory Control Sample, Duplicate, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GPP Letter of Instruction. See pages 12 through 13 for QC details.

Analytical Notes:

- Preparation Date: 06-jan-2005.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19945 (SDG# 20042473, SAF# F04-015).
- Nitrate and Sulfate - Sample B19942 results were B-flagged; the analytes were less than the reportable detection limit, but greater than or equal to the method detection limit.

All QC controls are within the established limits.

Cyanide- The hold time for this analysis was met. A Blank, Preparation Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GPP Letter of Instruction. See page 14 for QC details. Analytical Note:

- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19939 (SDG# 20042380, SAF# F04-015).

All QC controls are within the established limits.

ICP-MS Metals – The hold time for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See pages 15 through 17 for QC details. Analytical Notes:

- Preparation Date: 20-dec-2004.

- Matrix Spike and Matrix Spike Duplicate precision was analyzed on sample# B1BR60 (SDG# 20042450, SAF# F04-033).
- Mercury and Silver - The analytes detected in the associated preparation Blank sample were evaluated and there was no significant affect on the sample B19942 results.
- Silver – The Laboratory Control Sample recovery was below established laboratory limits, but within Manufacturer's limits. Sample B19942 result was not flagged.
- Mercury - The Laboratory Control Sample recovery exceeded established laboratory limits. Sample B19942 result was below the detection limit and U-flagged.

All other QC controls are within the established limits.

Percent Solids – Analyzed for organic results correction.

pH – The hold time for this analysis was met. All internal laboratory controls were within established limits.

Organic Comments

- Sample results were moisture corrected and reported on a dry-weight basis.

PCB – The hold time for this analysis was met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See pages 21 through 22 for QC details. Analytical Notes:

- Preparation Date: 14-dec-2004.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19197 (SDG# 20042304, SAF# F03-025).
- Tetrachloro-m-xylene (surrogate) – Sample B19942, Laboratory Control Sample and Matrix Spike Duplicate recoveries were below established laboratory limits and the Spike Relative Percent Difference exceeded established laboratory limits, due to evaporation of the TCX during excessive blow down concentration. All other surrogates recoveries were within established limits and sample B19942 results were not flagged.

All other QC controls are within the established limits.

Semi-VOA – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See pages 23 through 26 for QC details. Analytical Notes:

- Preparation Date: 14-dec-2004.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19940 (SDG# 20042380, SAF# F04-015).

All QC controls are within the established limits.

TPHD-WA Diesel - The hold times for this analysis were met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GPP Letter of Instruction. See page 27 for QC details. Analytical Notes:

- Preparation Date: 14-dec-2004.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19940 (SDG# 20042380, SAF# F04-015).

All QC controls are within the established limits.

TPHD-WA Gas - The hold times for this analysis were met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GPP Letter of Instruction. See page 28 for QC details. Analytical Notes:

- Preparation Date: 28-dec-2004.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19943 (SDG# 20042435, SAF# F04-015)
- Total Petroleum Hydrocarbons Gas – The Laboratory Control Sample recovery was slightly below established laboratory limits. Sample B19942 result was below the detection limit and U-flagged.

All other QC controls are within the established limits.

VOA – The hold times for this analysis were met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See pages 29 through 31 for QC details. Analytical Note:

- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19974 (SDG# 20042382, SAF# F04-019).

All QC controls are within the established limits.

RadioChemistry Comments

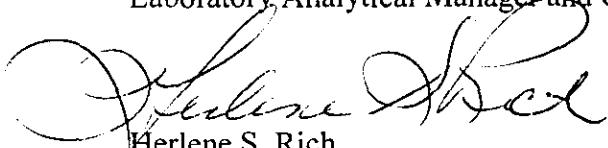
RadChem – There are no hold times associated with these WDOE accredited methods. A Blank, Laboratory Control Sample and Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See pages 33 through 36 for QC details. Analytical Notes:

- Americium-241, Plutonium-239/240, Strontium-89/90 and Uranium-238 - Duplicate QC samples were analyzed on sample# B1B578 (SDG# 20042392, SAF# F03-006).
- Americum-241 – The Duplicate Relative Percent Difference exceeded established laboratory limits. The RPD criterion does not apply to low level samples.

All other QC controls are within the established limits.

Radiochemical Tracer Percent Recovery			
Sample Number	Lab Sample ID	Isotope	Tracer Recovery (Percent)
BLANK		Sr-85	86.7
LCS		Sr-85	101.8
B1B578	W040002592	Sr-85	101.2
DUPLICATE	W040002592	Sr-85	99.1
B19942	W040002599	Sr-85	87.6
BLANK		U-232	72.0
LCS		U-232	80.5
B1B578	W040002592	U-232	89.2
DUPLICATE	W040002592	U-232	88.2
B19942	W040002599	U-232	79.1
BLANK		Am-243	86.9
LCS		Am-243	81.3
B1B578	W040002592	Am-243	88.5
DUPLICATE	W040002592	Am-243	78.9
B19942	W040002599	Am-243	88.2
BLANK		Pu-242	67.1
LCS		Pu-242	80.2
B1B578	W040002592	Pu-242	69.2
DUPLICATE	W040002592	Pu-242	78.4
B19942	W040002599	Pu-242	76.7

This Summary Report is in compliance with the SOW, both technically and for completeness.
Release of the data contained in this hard copy report has been authorized by the WSCF
Laboratory Analytical Manager and Client Services, as verified by the following signature.



Herlene S. Rich
WSCF Production Control

Abbreviations

Hg – mercury
IC – ion chromatography
ICP – inductively coupled plasma
ICP/AES – ICP/atomic emission spectroscopy
ICP/MS – ICP/mass spectrometry
Total U – total uranium
AT/TB – total alpha/total beta
AEA – Alpha Energy Analysis
WTPH-G – Total Hydrocarbons-Gasoline

Am – americium
Cm - curium
Pu – plutonium
Np – neptunium
GEA – gamma energy analysis
H3 – Tritium
Sr – Strontium 89, 90
WTPH-D – Total Hydrocarbons-Diesel
TSS – Total Suspended Solids

M8141-SLF-05-041

ATTACHMENT 2

ANALYTICAL RESULTS

Consisting of 36 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

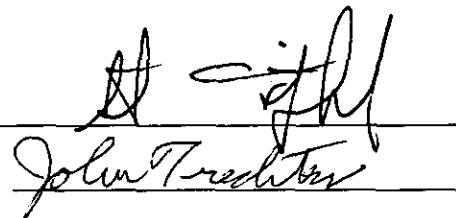
for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical:

 _____

John Trechter (John Trechter)

All results are reported on an "as received" basis unless otherwise noted in the comment section.

Confidentiality Notice: The information contained in this report is privileged and confidential information intended only for the use of the addressee. If the reader of this report is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone at (509) 373-7020.

Contract#: FH-EIS-2003-MEM-001

Report#: WSCF20042399

Report Date: 18-jan-2005

Report WGPP/ver. 1.1

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent **Project:** F04-015 **Group #:** WSCF20042399

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample	Receive
Inorganic												
W040002599	B19942	TRENT	57-12-5	Cyanide	SOIL	LA-695-402	U	< 0.200	mg/kg	1.00	0.20	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	TS	Total solids	SOIL	LA-519-412		94.7	%	1.00	0.0	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	PH	pH Measurement	SOIL	LA-212-411		8.85	pH	1.00	0.010	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	16984-48-8	Fluoride	SOIL	LA-533-410	U	< 1.15	mg/kg	50.00	1.2	01/05/05 12/14/04 12/14/04
W040002599	B19942	TRENT	NO2-N	Nitrogen in Nitrite	SOIL	LA-533-410	U	< 0.950	mg/kg	50.00	0.95	01/05/05 12/14/04 12/14/04
W040002599	B19942	TRENT	NO3-N	Nitrogen in Nitrate	SOIL	LA-533-410	B	1.71	mg/kg	50.00	0.65	01/05/05 12/14/04 12/14/04
W040002599	B19942	TRENT	PO4-P	Phosphate (P) by IC	SOIL	LA-533-410	U	< 2.70	mg/kg	50.00	2.7	01/05/05 12/14/04 12/14/04
W040002599	B19942	TRENT	14808-79-8	Sulfate	SOIL	LA-533-410	B	21.7	mg/kg	50.00	5.0	01/05/05 12/14/04 12/14/04
W040002599	B19942	TRENT	7440-22-4	Silver	SOIL	LA-505-412	U	< 1.97	mg/kg	9.86	2.0	12/21/04 12/14/04 12/14/04
W040002599	B19942	TRENT	7440-43-9	Cadmium	SOIL	LA-505-412	U	< 0.986	mg/kg	9.86	0.99	12/21/04 12/14/04 12/14/04
W040002599	B19942	TRENT	7440-47-3	Chromium	SOIL	LA-505-412		52.1	mg/kg	9.86	3.0	12/21/04 12/14/04 12/14/04
W040002599	B19942	TRENT	7440-50-8	Copper	SOIL	LA-505-412		20.5	mg/kg	9.86	4.9	12/21/04 12/14/04 12/14/04
W040002599	B19942	TRENT	7439-92-1	Lead	SOIL	LA-505-412	U	< 11.8	mg/kg	9.86	12	12/21/04 12/14/04 12/14/04
W040002599	B19942	TRENT	7439-97-6	Mercury	SOIL	LA-505-412	U	< 0.986	mg/kg	9.86	0.99	12/21/04 12/14/04 12/14/04
W040002599	B19942	TRENT	7440-61-1	Uranium	SOIL	LA-505-412	U	< 0.986	mg/kg	9.86	0.99	12/21/04 12/14/04 12/14/04

MDL=Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

U - Analyzed for but not detected above limiting criteria.

RQ=Result Qualifier

DF=Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: Anions by Ion Chromatography

SAF Number: NA

Sample Date: 12/20/04

Receive Date: 12/20/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002744

BATCH QC ASSOCIATED WITH SAMPLE

DUP	Fluoride	16984-48-8	<1.15e0	n/a	RPD	01/05/05	0.000	20.000	U
DUP	Nitrogen in Nitrite	NO2-N	<9.50e-1	n/a	RPD	01/05/05	0.000	20.000	U
DUP	Nitrogen in Nitrate	NO3-N	2.16e+00	11.247	RPD	01/05/05	0.000	20.000	
DUP	Phosphate (P) by IC	PO4-P	<2.70e0	n/a	RPD	01/05/05	0.000	20.000	U
DUP	Sulfate	14808-79-8	<5.00e0	n/a	RPD	01/05/05	0.000	20.000	U
MS	Fluoride	16984-48-8	4.34e-01	87.854	% Recov	01/05/05	75.000	125.000	
MS	Nitrogen in Nitrite	NO2-N	4.83e-01	96.600	% Recov	01/05/05	75.000	125.000	
MS	Nitrogen in Nitrate	NO3-N	4.36e-01	96.674	% Recov	01/05/05	75.000	125.000	
MS	Phosphate (P) by IC	PO4-P	7.97e-01	82.250	% Recov	01/05/05	75.000	125.000	
MS	Sulfate	14808-79-8	1.85e+00	92.500	% Recov	01/05/05	75.000	125.000	
MSD	Fluoride	16984-48-8	4.56e-01	92.308	% Recov	01/05/05	75.000	125.000	
MSD	Nitrogen in Nitrite	NO2-N	4.70e-01	94.000	% Recov	01/05/05	75.000	125.000	
MSD	Nitrogen in Nitrate	NO3-N	4.56e-01	101.109	% Recov	01/05/05	75.000	125.000	
MSD	Phosphate (P) by IC	PO4-P	8.25e-01	85.139	% Recov	01/05/05	75.000	125.000	
MSD	Sulfate	14808-79-8	1.81e+00	90.500	% Recov	01/05/05	75.000	125.000	

BATCH QC

BLANK	Fluoride	16984-48-8	<2.30e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Fluoride	16984-48-8	<2.30e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Fluoride	16984-48-8	<2.30e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	<1.90e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	<1.90e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Nitrogen in Nitrite	NO2-N	<1.90e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Nitrogen in Nitrate	NO3-N	<1.30e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Nitrogen in Nitrate	NO3-N	<1.30e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Nitrogen in Nitrate	NO3-N	<1.30e-2	n/a	mg/L	01/05/05	0.000	300.000	U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: Anions by Ion Chromatography

SAF Number: NA

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Phosphate (P) by IC	PO4-P	<5.40e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Phosphate (P) by IC	PO4-P	<5.40e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Phosphate (P) by IC	PO4-P	<5.40e-2	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<1.00e-1	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<1.00e-1	n/a	mg/L	01/05/05	0.000	300.000	U
BLANK	Sulfate	14808-79-8	<1.00e-1	n/a	mg/L	01/05/05	0.000	300.000	U
LCS	Fluoride	16984-48-8	9.79e+01	99.189	% Recov	01/05/05	80.000	120.000	
LCS	Fluoride	16984-48-8	9.02e+01	91.388	% Recov	01/05/05	80.000	120.000	
LCS	Nitrogen in Nitrite	NO2-N	1.02e+02	102.000	% Recov	01/05/05	80.000	120.000	
LCS	Nitrogen in Nitrite	NO2-N	9.86e+01	98.600	% Recov	01/05/05	80.000	120.000	
LCS	Nitrogen in Nitrate	NO3-N	9.12e+01	101.221	% Recov	01/05/05	80.000	120.000	
LCS	Nitrogen in Nitrate	NO3-N	9.51e+01	105.549	% Recov	01/05/05	80.000	120.000	
LCS	Phosphate (P) by IC	PO4-P	1.90e+02	98.039	% Recov	01/05/05	80.000	120.000	
LCS	Phosphate (P) by IC	PO4-P	1.94e+02	100.103	% Recov	01/05/05	80.000	120.000	
LCS	Sulfate	14808-79-8	3.89e+02	97.494	% Recov	01/05/05	80.000	120.000	
LCS	Sulfate	14808-79-8	3.85e+02	96.491	% Recov	01/05/05	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: Cyanide by Midi/Spectrophotom

SAF Number: NA

Sample Date: 12/10/04

Receive Date: 12/10/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002581

BATCH QC ASSOCIATED WITH SAMPLE

MS	Cyanide by Midi/Spectrophotom	57-12-5	100.2	100.200	% Recov	12/15/04	75.000	125.000
MSD	Cyanide by Midi/Spectrophotom	57-12-5	90.2	90.200	% Recov	12/15/04	75.000	125.000
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	90.200	10.504	RPD	12/15/04	0.000	20.000

BATCH QC

BLANK	Cyanide by Midi/Spectrophotom	57-12-5	1	1.000	ug/L	12/15/04	-4.000	4.000
BLNK-PREP	Cyanide by Midi/Spectrophotom	57-12-5	1	1.000	ug/L	12/15/04	-4.000	4.000
LCS	Cyanide by Midi/Spectrophotom	57-12-5	98.1	98.100	% Recov	12/15/04	85.000	115.000

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: NA

Sample Date: 12/14/04

Receive Date: 12/14/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002599

BATCH QC ASSOCIATED WITH SAMPLE

MS	Silver	7440-22-4	369.9	92.475	% Recov	12/21/04	70.000	130.000	
MS	Cadmium	7440-43-9	396.4	99.100	% Recov	12/21/04	70.000	130.000	
MS	Chromium	7440-47-3	281.19	70.297	% Recov	12/21/04	70.000	130.000	
MS	Copper	7440-50-8	368.36	92.090	% Recov	12/21/04	70.000	130.000	
MS	Mercury	7439-97-6	20.31	101.550	% Recov	12/21/04	70.000	130.000	
MS	Lead	7439-92-1	386.2	96.550	% Recov	12/21/04	70.000	130.000	
MS	Uranium	7440-61-1	396.9	99.225	% Recov	12/21/04	70.000	130.000	
MSD	Silver	7440-22-4	388	97.000	% Recov	12/21/04	70.000	130.000	
MSD	Cadmium	7440-43-9	411.1	102.775	% Recov	12/21/04	70.000	130.000	
MSD	Chromium	7440-47-3	289.69	72.422	% Recov	12/21/04	70.000	130.000	
MSD	Copper	7440-50-8	383.96	95.990	% Recov	12/21/04	70.000	130.000	
MSD	Mercury	7439-97-6	21.18	105.900	% Recov	12/21/04	70.000	130.000	
MSD	Lead	7439-92-1	399.2	99.800	% Recov	12/21/04	70.000	130.000	
MSD	Uranium	7440-61-1	417	104.250	% Recov	12/21/04	70.000	130.000	

Lab ID: W040002619

BATCH QC ASSOCIATED WITH SAMPLE

MS	Silver	7440-22-4	374.79	93.698	% Recov	12/21/04	70.000	130.000	
MS	Cadmium	7440-43-9	393.6	98.400	% Recov	12/21/04	70.000	130.000	
MS	Chromium	7440-47-3	349.1	87.275	% Recov	12/21/04	70.000	130.000	
MS	Copper	7440-50-8	375.24	93.810	% Recov	12/21/04	70.000	130.000	
MS	Mercury	7439-97-6	20.35	101.750	% Recov	12/21/04	70.000	130.000	
MS	Lead	7439-92-1	384.5	96.125	% Recov	12/21/04	70.000	130.000	
MS	Uranium	7440-61-1	386	96.500	% Recov	12/21/04	70.000	130.000	
MSD	Silver	7440-22-4	387.29	96.823	% Recov	12/21/04	70.000	130.000	
MSD	Cadmium	7440-43-9	412.2	103.050	% Recov	12/21/04	70.000	130.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: NA
 Sample Date: 12/14/04
 Receive Date: 12/14/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MSD	Chromium	7440-47-3	358.8	89.700	% Recov	12/21/04	70.000	130.000	
MSD	Copper	7440-50-8	397.34	99.335	% Recov	12/21/04	70.000	130.000	
MSD	Mercury	7439-97-6	21.55	107.750	% Recov	12/21/04	70.000	130.000	
MSD	Lead	7439-92-1	401.5	100.375	% Recov	12/21/04	70.000	130.000	
MSD	Uranium	7440-61-1	404.2	101.050	% Recov	12/21/04	70.000	130.000	
Lab ID: W040002681									
BATCH QC ASSOCIATED WITH SAMPLE									
MS	Silver	7440-22-4	372.3	93.075	% Recov	12/21/04	70.000	130.000	
MS	Cadmium	7440-43-9	394.8	98.700	% Recov	12/21/04	70.000	130.000	
MS	Chromium	7440-47-3	346	86.500	% Recov	12/21/04	70.000	130.000	
MS	Copper	7440-50-8	382.17	95.543	% Recov	12/21/04	70.000	130.000	
MS	Mercury	7439-97-6	20.24	101.200	% Recov	12/21/04	70.000	130.000	
MS	Lead	7439-92-1	392.3	98.075	% Recov	12/21/04	70.000	130.000	
MS	Uranium	7440-61-1	398.02	99.505	% Recov	12/21/04	70.000	130.000	
MSD	Silver	7440-22-4	389.9	97.475	% Recov	12/21/04	70.000	130.000	
MSD	Cadmium	7440-43-9	409.2	102.300	% Recov	12/21/04	70.000	130.000	
MSD	Chromium	7440-47-3	342	85.500	% Recov	12/21/04	70.000	130.000	
MSD	Copper	7440-50-8	383.67	95.918	% Recov	12/21/04	70.000	130.000	
MSD	Mercury	7439-97-6	21.71	108.550	% Recov	12/21/04	70.000	130.000	
MSD	Lead	7439-92-1	403.3	100.825	% Recov	12/21/04	70.000	130.000	
MSD	Uranium	7440-61-1	406.82	101.705	% Recov	12/21/04	70.000	130.000	
SPK-RPD	Silver	7440-22-4	97.475	4.618	RPD	12/21/04	0.000	20.000	
SPK-RPD	Cadmium	7440-43-9	102.300	3.582	RPD	12/21/04	0.000	20.000	
SPK-RPD	Chromium	7440-47-3	85.500	1.163	RPD	12/21/04	0.000	20.000	
SPK-RPD	Copper	7440-50-8	95.918	0.392	RPD	12/21/04	0.000	20.000	
SPK-RPD	Mercury	7439-97-6	108.550	7.008	RPD	12/21/04	0.000	20.000	
SPK-RPD	Lead	7439-92-1	100.825	2.765	RPD	12/21/04	0.000	20.000	
SPK-RPD	Uranium	7440-61-1	101.705	2.187	RPD	12/21/04	0.000	20.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: NA

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BATCH QC									
BLANK	Silver	7440-22-4	0.34	0.340	ug/L	12/21/04			
BLANK	Cadmium	7440-43-9	<0.1	n/a	ug/L	12/21/04		U	
BLANK	Chromium	7440-47-3	<0.3	n/a	ug/L	12/21/04		U	
BLANK	Copper	7440-50-8	<0.5	n/a	ug/L	12/21/04		U	
BLANK	Mercury	7439-97-6	0.14	0.140	ug/L	12/21/04			
BLANK	Lead	7439-92-1	<1.2	n/a	ug/L	12/21/04		U	
BLANK	Uranium	7440-61-1	<0.1	n/a	ug/L	12/21/04		U	
LCS	Silver	7440-22-4	95.05	94.109	% Recov	12/21/04	110.000	170.000	*
LCS	Cadmium	7440-43-9	99.18	93.566	% Recov	12/21/04	88.000	127.000	
LCS	Chromium	7440-47-3	173.1	87.868	% Recov	12/21/04	50.000	126.000	
LCS	Copper	7440-50-8	68.49	93.184	% Recov	12/21/04	61.000	134.000	
LCS	Mercury	7439-97-6	2.71	143.386	% Recov	12/21/04	75.000	114.000	*
LCS	Lead	7439-92-1	69.89	95.478	% Recov	12/21/04	87.000	120.000	
LCS	Uranium	7440-61-1	411.8	102.950	% Recov	12/21/04	89.000	107.000	

WSCF

ANALYTICAL RESULTS REPORT

Attention:
Project:

Steve Trent
F04-015: F04-015

Group #: WSCF20042399

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF Method	RQ	Result	Unit	DF	MDL	Analyze Sample	Receive
Organic												
W040002599	B19942	TRENT	TPH/GASOLINE	Total Pet. Hydrocarbons Gas	SOIL	LA-523-443	U	< 250	ug/kg	1.00	2.5e +02	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	12674-11-2	Aroclor-1016	SOIL	LA-523-427	U	< 52.0	ug/kg	1.00	52	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	11104-28-2	Aroclor-1221	SOIL	LA-523-427	U	< 100	ug/kg	1.00	1.0e +02	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	11141-16-5	Aroclor-1232	SOIL	LA-523-427	U	< 52.0	ug/kg	1.00	52	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	53469-21-9	Aroclor-1242	SOIL	LA-523-427	U	< 52.0	ug/kg	1.00	52	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	12672-29-6	Aroclor-1248	SOIL	LA-523-427	U	< 52.0	ug/kg	1.00	52	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	11097-69-1	Aroclor-1254	SOIL	LA-523-427	U	< 52.0	ug/kg	1.00	52	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	11096-82-5	Aroclor-1260	SOIL	LA-523-427	U	< 52.0	ug/kg	1.00	52	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	37324-23-5	Aroclor-1262	SOIL	LA-523-427	U	< 52.0	ug/kg	1.00	52	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	11100-14-4	Aroclor-1268	SOIL	LA-523-427	U	< 52.0	ug/kg	1.00	52	12/15/04 12/14/04 12/14/04
W040002599	B19942	TRENT	100-02-7	4-Nitrophenol	SOIL	LA-523-456	U	< 680	ug/kg	1.00	6.8e +02	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	106-46-7	1,4-Dichlorobenzene	SOIL	LA-523-456	U	< 330	ug/kg	1.00	3.3e +02	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	108-95-2	Phenol	SOIL	LA-523-456	U	< 110	ug/kg	1.00	1.1e +02	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	120-82-1	1,2,4-Trichlorobenzene	SOIL	LA-523-456	U	< 310	ug/kg	1.00	3.1e +02	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	121-14-2	2,4-Dinitrotoluene	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	129-00-0	Pyrene	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	59-50-7	4-Chloro-3-methylphenol	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	621-64-7	N-Nitrosodi-n-dipropylamine	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	83-32-9	Acenaphthene	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	87-86-5	Pentachlorophenol	SOIL	LA-523-456	U	< 320	ug/kg	1.00	3.2e +02	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	95-57-8	2-Chlorophenol	SOIL	LA-523-456	U	< 150	ug/kg	1.00	1.5e +02	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	126-73-8	Tributyl phosphate	SOIL	LA-523-456	U	< 70.0	ug/kg	1.00	70	12/28/04 12/14/04 12/14/04
W040002599	B19942	TRENT	75-35-4	1,1-Dichloroethene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	79-01-6	Trichloroethene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	71-43-2	Benzene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	108-88-3	Toluene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04

MDL=Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

U - Analyzed for but not detected above limiting criteria.

RQ=Result Qualifier

DF=Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent **Group #:** WSCF20042399
Project: F04-015: F04-015

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF						Analyze Sample	Receive
					Method	RQ	Result	Unit	DF	MDL		
W040002599	B19942	TRENT	108-90-7	Chlorobenzene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	75-34-3	1,1-Dichloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	100-41-4	Ethylbenzene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	100-42-5	Styrene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	10061-01-5	cis-1,3-Dichloropropene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	10061-02-6	trans-1,3-Dichloropropene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	107-06-2	1,2-Dichloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	108-10-1	4-Methyl-2-Pentanone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	124-48-1	Dibromochloromethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	127-18-4	Tetrachloroethene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	1330-20-7	Xylenes (total)	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	540-59-0	1,2-Dichloroethene(Total)	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	56-23-5	Carbon tetrachloride	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	591-78-6	2-Hexanone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	67-64-1	Acetone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	67-66-3	Chloroform	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	71-55-6	1,1,1-Trichloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	74-83-9	Bromomethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	74-87-3	Chloromethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	75-00-3	Chloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	75-01-4	Vinyl chloride	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	75-09-2	Methylenechloride	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	75-15-0	Carbon disulfide	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	75-25-2	Bromoform	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	75-27-4	Bromodichloromethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	78-87-5	1,2-Dichloropropane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	78-93-3	2-Butanone	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04

MDL=Minimum Detection Limit

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U - Analyzed for but not detected above limiting criteria.

RQ=Result Qualifier

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* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

**Attention:
Project:**

Steve Trent
F04-015: F04-015

Group #: WSCF20042399

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W040002599	B19942	TRENT	79-00-5	1,1,2-Trichloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	79-34-5	1,1,2,2-Tetrachloroethane	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	71-36-3	1-Butanol	SOIL	LA-523-455	U	< 42.0	ug/kg	1.00	42	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	104-51-8	n-Butylbenzene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	156-60-5	trans-1,2-Dichloroethylene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	156-59-2	cis-1,2-Dichloroethylene	SOIL	LA-523-455	U	< 2.10	ug/kg	1.00	2.1	12/20/04 12/14/04 12/14/04
W040002599	B19942	TRENT	TPHDIESEL	Total Pet. Hydrocarbons Diesel	SOIL	NWTOPH	U	< 3.90e+03	ug/kg	1.00	3.9e+03	12/16/04 12/14/04 12/14/04
W040002599	B19942	TRENT	TPHKEROSENE	Kerosene	SOIL	NWTOPH	U	< 3.90e+03	ug/kg	1.00	3.9e+03	12/16/04 12/14/04 12/14/04

MDL=Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

U - Analyzed for but not detected above limiting criteria.

RQ=Result Qualifier

DF=Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: PCBs complete list

SAF Number: NA
 Sample Date: 12/02/04
 Receive Date: 12/02/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002532

BATCH QC ASSOCIATED WITH SAMPLE

MS	Aroclor-1254	11097-69-1	1170.7	115.000	% Recov	12/15/04	75.000	125.000	
MS	Decachlorobiphenyl	2051-24-3	919.97	90.000	% Recov	12/15/04	50.000	150.000	
MS	Tetrachloro-m-xylene	877-09-8	905.45	88.600	% Recov	12/15/04	50.000	150.000	
MSD	Aroclor-1254	11097-69-1	1213.5	118.000	% Recov	12/15/04	75.000	125.000	
MSD	Decachlorobiphenyl	2051-24-3	1001.2	97.000	% Recov	12/15/04	50.000	150.000	
MSD	Tetrachloro-m-xylene	877-09-8	234.89	22.800	% Recov	12/15/04	50.000	150.000	*
SPK-RPD	Aroclor-1254	11097-69-1	118.000	2.575	RPD	12/15/04	0.000	25.000	
SPK-RPD	Decachlorobiphenyl	2051-24-3	97.000	7.487	RPD	12/15/04	0.000	20.000	
SPK-RPD	Tetrachloro-m-xylene	877-09-8	22.800	118.133	RPD	12/15/04	0.000	20.000	*

Lab ID: W040002599

BATCH QC ASSOCIATED WITH SAMPLE

SURR	Decachlorobiphenyl	2051-24-3	978.10	94.500	% Recov	12/15/04	50.000	150.000	
SURR	Tetrachloro-m-xylene	877-09-8	509.85	49.300	% Recov	12/15/04	50.000	150.000	*

BATCH QC

BLANK	Aroclor-1016	12674-11-2	< 50	n/a	UGKG	12/15/04		U	
BLANK	Aroclor-1221	11104-28-2	< 100	n/a	ug/Kg	12/15/04		U	
BLANK	Aroclor-1232	11141-16-5	< 50	n/a	ug/Kg	12/15/04		U	
BLANK	Aroclor-1242	53469-21-9	< 50	n/a	ug/Kg	12/15/04		U	
BLANK	Aroclor-1248	12672-29-6	< 50	n/a	ug/Kg	12/15/04		U	
BLANK	Aroclor-1254	11097-69-1	< 50	n/a	ug/Kg	12/15/04		U	
BLANK	Aroclor-1260	11096-82-5	< 50	n/a	ug/Kg	12/15/04		U	
BLANK	Aroclor-1262	37324-23-5	< 50	n/a	ug/Kg	12/15/04		U	
BLANK	Aroclor-1268	11100-14-4	< 50	n/a	ug/Kg	12/15/04		U	
BLANK	Decachlorobiphenyl	2051-24-3	903.87	90.400	% Recov	12/15/04	50.000	150.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: PCBs complete list

SAF Number: NA
 Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	Tetrachloro-m-xylene	877-09-8	911.11	91.100	% Recov	12/15/04	50.000	150.000	
LCS	Aroclor-1254	11097-69-1	987.29	98.700	% Recov	12/15/04	70.000	130.000	
LCS	Decachlorobiphenyl	2051-24-3	949.54	95.000	% Recov	12/15/04	50.000	150.000	
LCS	Tetrachloro-m-xylene	877-09-8	0.00	0.000	% Recov	12/15/04	50.000	150.000	*

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: SW-846 8270B Semi-Vols

SAF Number: NA
 Sample Date: 12/10/04
 Receive Date: 12/10/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002582

BATCH QC ASSOCIATED WITH SAMPLE

MS	1,2,4-Trichlorobenzene	120-82-1	2961.9	84.700	% Recov	12/22/04	46.000	107.000	
MS	1,4-Dichlorobenzene	106-46-7	2872.5	82.200	% Recov	12/22/04	30.000	96.000	
MS	2,4-Dinitrotoluene	121-14-2	2825.9	80.800	% Recov	12/22/04	59.000	106.000	
MS	2-Fluorophenol	367-12-4	3119.9	89.200	% Recov	12/22/04	42.000	105.000	
MS	Acenaphthene	83-32-9	3226.6	92.300	% Recov	12/22/04	61.000	116.000	
MS	4-Chloro-3-methylphenol	59-50-7	4806.0	91.700	% Recov	12/22/04	61.000	106.000	
MS	2-Chlorophenol	95-57-8	4382.0	83.600	% Recov	12/22/04	66.000	106.000	
MS	N-Nitrosodi-n-dipropylamine	621-64-7	3334.7	95.400	% Recov	12/22/04	71.000	114.000	
MS	2-Fluorobiphenyl	321-60-8	3037.1	86.900	% Recov	12/22/04	56.000	122.000	
MS	Phenol	108-95-2	5033.6	96.000	% Recov	12/22/04	42.000	111.000	
MS	Nitrobenzene-d5	4165-60-0	3241.8	92.700	% Recov	12/22/04	64.000	111.000	
MS	4-Nitrophenol	100-02-7	5048.7	96.300	% Recov	12/22/04	32.000	118.000	
MS	Pentachlorophenol	87-86-5	4082.1	77.800	% Recov	12/22/04	62.000	114.000	
MS	Phenol-d5	4165-62-2	3408.5	97.500	% Recov	12/22/04	54.000	120.000	
MS	Pyrene	129-00-0	2863.3	81.900	% Recov	12/22/04	66.000	118.000	
MS	2,4,6-Tribromophenol	118-79-6	3209.4	91.800	% Recov	12/22/04	24.000	122.000	
MS	Terphenyl-d14 (7Cl)	98904-43-9	3128.5	89.500	% Recov	12/22/04	35.000	150.000	
MSD	1,2,4-Trichlorobenzene	120-82-1	2829.6	81.000	% Recov	12/22/04	46.000	107.000	
MSD	1,4-Dichlorobenzene	106-46-7	2727.4	78.100	% Recov	12/22/04	30.000	96.000	
MSD	2,4-Dinitrotoluene	121-14-2	2690.2	77.000	% Recov	12/22/04	59.000	106.000	
MSD	2-Fluorophenol	367-12-4	3026.0	86.600	% Recov	12/22/04	42.000	105.000	
MSD	Acenaphthene	83-32-9	3025.5	86.600	% Recov	12/22/04	61.000	116.000	
MSD	4-Chloro-3-methylphenol	59-50-7	4603.5	87.900	% Recov	12/22/04	61.000	106.000	
MSD	2-Chlorophenol	95-57-8	4113.5	78.500	% Recov	12/22/04	66.000	106.000	
MSD	N-Nitrosodi-n-dipropylamine	621-64-7	3239.2	92.700	% Recov	12/22/04	71.000	114.000	
MSD	2-Fluorobiphenyl	321-60-8	2961.6	84.800	% Recov	12/22/04	56.000	122.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: SW-846 8270B Semi-Vols

SAF Number: NA
 Sample Date: 12/10/04
 Receive Date: 12/10/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
MSD	Phenol	108-95-2	4875.8	93.100	% Recov	12/22/04	42.000	111.000	
MSD	Nitrobenzene-d5	4165-60-0	3161.2	90.500	% Recov	12/22/04	64.000	111.000	
MSD	4-Nitrophenol	100-02-7	4830.5	92.200	% Recov	12/22/04	32.000	118.000	
MSD	Pentachlorophenol	87-86-5	3962.4	75.600	% Recov	12/22/04	62.000	114.000	
MSD	Phenol-d5	4165-62-2	2846.9	81.500	% Recov	12/22/04	54.000	120.000	
MSD	Pyrene	129-00-0	2748.0	78.700	% Recov	12/22/04	66.000	118.000	
MSD	2,4,6-Tribromophenol	118-79-6	2965.3	84.900	% Recov	12/22/04	24.000	122.000	
MSD	Terphenyl-d14 (7Cl)	98904-43-9	3030.8	86.800	% Recov	12/22/04	35.000	150.000	
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	81.000	4.466	RPD	12/29/04	0.000	20.000	
SPK-RPD	1,4-Dichlorobenzene	106-46-7	78.100	5.115	RPD	12/29/04	0.000	20.000	
SPK-RPD	2,4-Dinitrotoluene	121-14-2	77.000	4.816	RPD	12/29/04	0.000	20.000	
SPK-RPD	2-Fluorophenol	367-12-4	86.600	2.958	RPD	12/29/04	0.000	20.000	
SPK-RPD	Acenaphthene	83-32-9	86.600	6.372	RPD	12/29/04	0.000	20.000	
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	87.900	4.232	RPD	12/29/04	0.000	20.000	
SPK-RPD	2-Chlorophenol	95-57-8	78.500	6.292	RPD	12/29/04	0.000	20.000	
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	92.700	2.871	RPD	12/29/04	0.000	20.000	
SPK-RPD	2-Fluorobiphenyl	321-60-8	84.800	2.446	RPD	12/29/04	0.000	20.000	
SPK-RPD	Phenol	108-95-2	93.100	3.067	RPD	12/29/04	0.000	20.000	
SPK-RPD	Nitrobenzene-d5	4165-60-0	90.500	2.402	RPD	12/29/04	0.000	20.000	
SPK-RPD	4-Nitrophenol	100-02-7	92.200	4.350	RPD	12/29/04	0.000	20.000	
SPK-RPD	Pentachlorophenol	87-86-5	75.600	2.868	RPD	12/29/04	0.000	20.000	
SPK-RPD	Phenol-d5	4165-62-2	81.500	17.877	RPD	12/29/04	0.000	20.000	
SPK-RPD	Pyrene	129-00-0	78.700	3.985	RPD	12/29/04	0.000	20.000	
SPK-RPD	2,4,6-Tribromophenol	118-79-6	84.900	7.810	RPD	12/29/04	0.000	20.000	
SPK-RPD	Terphenyl-d14 (7Cl)	98904-43-9	86.800	3.063	RPD	12/29/04	0.000	20.000	

Lab ID: W040002599
 BATCH QC ASSOCIATED WITH SAMPLE

SURR	2-Fluorophenol	367-12-4	3017.3	86.200	% Recov	12/28/04	42.000	105.000
SURR	2-Fluorobiphenyl	321-60-8	3297.2	94.200	% Recov	12/28/04	56.000	122.000

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: SW-846 8270B Semi-Vols

SAF Number: NA
 Sample Date: 12/14/04
 Receive Date: 12/14/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
SURR	Nitrobenzene-d5	4165-60-0	3255.6	93.000	% Recov	12/28/04	64.000	111.000	-
SURR	Phenol-d5	4165-62-2	3308.2	94.500	% Recov	12/28/04	54.000	120.000	-
SURR	2,4,6-Tribromophenol	118-79-6	2898.4	82.800	% Recov	12/28/04	24.000	122.000	-
SURR	Terphenyl-d14 (7Cl)	98904-43-9	3074.3	87.800	% Recov	12/28/04	35.000	150.000	-
BATCH QC									
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 290	n/a	ug/Kg	12/22/04			U
BLANK	1,4-Dichlorobenzene	106-46-7	< 310	n/a	ug/Kg	12/22/04			U
BLANK	2,4-Dinitrotoluene	121-14-2	< 67	n/a	ug/Kg	12/22/04			U
BLANK	2-Fluorophenol	367-12-4	2255.7	67.700	% Recov	12/22/04	42.000	105.000	-
BLANK	Acenaphthene	83-32-9	< 67	n/a	ug/Kg	12/22/04			U
BLANK	4-Chloro-3-methylphenol	59-50-7	< 67	n/a	ug/Kg	12/22/04			U
BLANK	2-Chlorophenol	95-57-8	< 150	n/a	ug/Kg	12/22/04			U
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 67	n/a	ug/Kg	12/22/04			U
BLANK	2-Fluorobiphenyl	321-60-8	2559.3	76.800	% Recov	12/22/04	56.000	122.000	-
BLANK	Phenol	108-95-2	< 100	n/a	ug/Kg	12/22/04			U
BLANK	Nitrobenzene-d5	4165-60-0	2771.8	83.200	% Recov	12/22/04	64.000	111.000	-
BLANK	4-Nitrophenol	100-02-7	< 650	n/a	ug/Kg	12/22/04			U
BLANK	Pentachlorophenol	87-86-5	< 300	n/a	ug/Kg	12/22/04			U
BLANK	Phenol-d5	4165-62-2	2263.9	67.900	% Recov	12/22/04	54.000	120.000	-
BLANK	Pyrene	129-00-0	< 67	n/a	ug/Kg	12/22/04			U
BLANK	Tributyl phosphate	126-73-8	< 67	n/a	ug/Kg	12/22/04			U
BLANK	2,4,6-Tribromophenol	118-79-6	2001.2	60.000	% Recov	12/22/04	24.000	122.000	-
BLANK	Terphenyl-d14 (7Cl)	98904-43-9	2527.8	75.800	% Recov	12/22/04	35.000	150.000	-
LCS	1,2,4-Trichlorobenzene	120-82-1	3009.0	90.300	% Recov	12/22/04	46.000	107.000	-
LCS	1,4-Dichlorobenzene	106-46-7	2724.3	81.700	% Recov	12/22/04	42.000	111.000	-
LCS	2,4-Dinitrotoluene	121-14-2	2651.7	79.600	% Recov	12/22/04	59.000	106.000	-
LCS	2-Fluorophenol	367-12-4	3088.8	92.700	% Recov	12/22/04	50.000	110.000	-
LCS	Acenaphthene	83-32-9	3017.7	90.500	% Recov	12/22/04	61.000	116.000	-
LCS	4-Chloro-3-methylphenol	59-50-7	4589.5	91.800	% Recov	12/22/04	61.000	106.000	-

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: SW-846 8270B Semi-Vols

SAF Number: NA
 Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
LCS	2-Chlorophenol	95-57-8	3980.8	79.600	% Recov	12/22/04	66.000	106.000	
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	3085.9	92.600	% Recov	12/22/04	71.000	114.000	
LCS	2-Fluorobiphenyl	321-60-8	2962.6	88.900	% Recov	12/22/04	58.000	109.000	
LCS	Phenol	108-95-2	4769.1	95.400	% Recov	12/22/04	67.000	105.000	
LCS	Nitrobenzene-d5	4165-60-0	3237.8	97.100	% Recov	12/22/04	60.000	118.000	
LCS	4-Nitrophenol	100-02-7	4823.4	96.500	% Recov	12/22/04	32.000	118.000	
LCS	Pentachlorophenol	87-86-5	3906.7	78.100	% Recov	12/22/04	62.000	114.000	
LCS	Phenol-d5	4165-62-2	3643.2	109.000	% Recov	12/22/04	59.000	116.000	
LCS	Pyrene	129-00-0	2732.4	82.000	% Recov	12/22/04	66.000	118.000	
LCS	2,4,6-Tribromophenol	118-79-6	3110.4	93.300	% Recov	12/22/04	60.000	120.000	
LCS	Terphenyl-d14 (7Cl)	98904-43-9	3008.5	90.300	% Recov	12/22/04	60.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: WTPH-D TPH Diesel Range (Wa)

SAF Number: NA
Sample Date: 12/10/04
Receive Date: 12/10/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002582

BATCH QC ASSOCIATED WITH SAMPLE

MS	Kerosene	TPHKEROSENE	125310	95.300	% Recov	12/15/04	70.000	130.000	
MS	ortho-Terphenyl	Surr	84-15-1	27201	103.000	% Recov	12/15/04	70.000	130.000
MSD	Kerosene	TPHKEROSENE	121810	92.500	% Recov	12/15/04	70.000	130.000	
MSD	ortho-Terphenyl	Surr	84-15-1	27460	104.000	% Recov	12/15/04	70.000	130.000
SPK-RPD	ortho-Terphenyl	Surr	84-15-1	104.000	0.966	RPD	12/15/04	0.000	20.000

Lab ID: W040002599

BATCH QC ASSOCIATED WITH SAMPLE

SURR	ortho-Terphenyl	Surr	84-15-1	23919	90.900	% Recov	12/16/04	70.000	130.000
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BATCH QC

BLANK	Kerosene	TPHKEROSENE	< 3800	n/a	ug/Kg	12/15/04			U
BLANK	ortho-Terphenyl	Surr	84-15-1	23436	93.700	% Recov	12/15/04	70.000	130.000
BLANK	Total Pet. Hydrocarbons Diesel	TPHDIESEL	< 3800	n/a	ug/Kg	12/15/04			U
LCS	ortho-Terphenyl	Surr	84-15-1	49132	98.300	% Recov	12/15/04	70.000	130.000
LCS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	117760	94.200	% Recov	12/15/04	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: NWTPH-GX TPH Gasoline Range

SAF Number: NA

Sample Date: 12/15/04

Receive Date: 12/15/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002627

BATCH QC ASSOCIATED WITH SAMPLE

DUP	Total Pet. Hydrocarbons Gas	TPHGASOLINE	<250	n/a	RPD	12/28/04	0.000	20.000	U
MS	Total Pet. Hydrocarbons Gas	TPHGASOLINE	3000	83.333	% Recov	12/28/04	50.000	150.000	
MSD	Total Pet. Hydrocarbons Gas	TPHGASOLINE	3100	86.111	% Recov	12/28/04	50.000	150.000	
SPK-RPD	Total Pet. Hydrocarbons Gas	TPHGASOLINE	86.111	3.279	RPD	12/28/04	0.000	20.000	

BATCH QC

BLANK	Total Pet. Hydrocarbons Gas	TPHGASOLINE	<250	n/a	mg/L	12/28/04	0.000	300.000	U
LCS	Total Pet. Hydrocarbons Gas	TPHGASOLINE	1083	84.875	% Recov	12/28/04	85.000	115.000	*

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: VOA Ground Water Protection

SAF Number: NA
 Sample Date: 12/10/04
 Receive Date: 12/10/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002585

BATCH QC ASSOCIATED WITH SAMPLE

MS	1,1-Dichloroethene	75-35-4	26.380	106.000	% Recov	12/20/04	63.000	117.000	
MS	Benzene	71-43-2	27.270	109.000	% Recov	12/20/04	75.000	129.000	
MS	4-Bromofluorobenzene	460-00-4	50.200	100.000	% Recov	12/20/04	84.000	116.000	
MS	Chlorobenzene	108-90-7	28.160	113.000	% Recov	12/20/04	79.000	119.000	
MS	1,2-Dichloroethane-d4	17060-07-0	54.750	110.000	% Recov	12/20/04	82.000	136.000	
MS	Toluene-d8	2037-26-5	51.380	103.000	% Recov	12/20/04	89.000	119.000	
MS	Toluene	108-88-3	26.600	106.000	% Recov	12/20/04	76.000	120.000	
MS	Trichloroethene	79-01-6	25.880	104.000	% Recov	12/20/04	73.000	123.000	
MSD	1,1-Dichloroethene	75-35-4	25.150	101.000	% Recov	12/20/04	63.000	117.000	
MSD	Benzene	71-43-2	26.600	106.000	% Recov	12/20/04	75.000	129.000	
MSD	4-Bromofluorobenzene	460-00-4	49.020	98.000	% Recov	12/20/04	84.000	116.000	
MSD	Chlorobenzene	108-90-7	28.730	115.000	% Recov	12/20/04	79.000	119.000	
MSD	1,2-Dichloroethane-d4	17060-07-0	56.670	113.000	% Recov	12/20/04	82.000	136.000	
MSD	Toluene-d8	2037-26-5	51.320	103.000	% Recov	12/20/04	89.000	119.000	
MSD	Toluene	108-88-3	28.410	114.000	% Recov	12/20/04	76.000	120.000	
MSD	Trichloroethene	79-01-6	27.590	110.000	% Recov	12/20/04	73.000	123.000	
SPK-RPD	1,1-Dichloroethene	75-35-4	101.000	4.831	RPD	12/20/04	0.000	25.000	
SPK-RPD	Benzene	71-43-2	106.000	2.791	RPD	12/20/04	0.000	25.000	
SPK-RPD	4-Bromofluorobenzene	460-00-4	98.000	2.020	RPD	12/20/04	0.000	25.000	
SPK-RPD	Chlorobenzene	108-90-7	115.000	1.754	RPD	12/20/04	0.000	25.000	
SPK-RPD	1,2-Dichloroethane-d4	17060-07-0	113.000	2.691	RPD	12/20/04	0.000	25.000	
SPK-RPD	Toluene-d8	2037-26-5	103.000	0.000	RPD	12/20/04	0.000	25.000	
SPK-RPD	Toluene	108-88-3	114.000	7.273	RPD	12/20/04	0.000	25.000	
SPK-RPD	Trichloroethene	79-01-6	110.000	5.607	RPD	12/20/04	0.000	25.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: VOA Ground Water Protection

SAF Number: NA

Sample Date: 12/14/04

Receive Date: 12/14/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W040002599									
BATCH QC ASSOCIATED WITH SAMPLE									
SURR	4-Bromofluorobenzene	460-00-4	46.590	93.200	% Recov	12/20/04	71.000	125.000	
SURR	1,2-Dichloroethane-d4	17060-07-0	58.020	116.000	% Recov	12/20/04	80.000	134.000	
SURR	Toluene-d8	2037-26-5	53.130	106.000	% Recov	12/20/04	80.000	126.000	
BATCH QC									
BLANK	1,1-Dichloroethane	75-34-3	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1,1,1-Trichloroethane	71-55-6	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1,1,2-Trichloroethane	79-00-5	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1,1,2,2-Tetrachloroethane	79-34-5	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1,1-Dichloroethene	75-35-4	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1,2-Dichloroethane	107-06-2	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1,2-Dichloroethene(Total)	540-59-0	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1-Butanol	71-36-3	< 40	n/a	ug/Kg	12/20/04			U
BLANK	2-Hexanone	591-78-6	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	4-Methyl-2-Pentanone	108-10-1	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Acetone	67-64-1	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Bromodichloromethane	75-27-4	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Benzene	71-43-2	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	4-Bromofluorobenzene	460-00-4	49.610	99.200	% Recov	12/20/04	71.000	125.000	
BLANK	Bromoform	75-25-2	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	n-Butylbenzene	104-51-8	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Carbon disulfide	75-15-0	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Carbon tetrachloride	56-23-5	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Dibromochloromethane	124-48-1	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Chloroform	67-66-3	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Chlorobenzene	108-90-7	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	cis-1,2-Dichloroethylene	156-59-2	< 2.0	n/a	ug/Kg	12/20/04			U

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: VOA Ground Water Protection

SAF Number: NA

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
BLANK	cis-1,3-Dichloropropene	10061-01-5	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Chloroethane	75-00-3	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1,2-Dichloroethane-d4	17060-07-0	55.320	111.000	% Recov	12/20/04	80.000	134.000	
BLANK	trans-1,2-Dichloroethylene	156-60-5	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	1,2-Dichloropropane	78-87-5	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Ethylbenzene	100-41-4	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Bromomethane	74-83-9	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Chloromethane	74-87-3	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	2-Butanone	78-93-3	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Methylenechloride	75-09-2	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Tetrachloroethene	127-18-4	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Styrene	100-42-5	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Xylenes (total)	1330-20-7	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Toluene-d8	2037-26-5	53.170	106.000	% Recov	12/20/04	80.000	126.000	
BLANK	Toluene	108-88-3	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	trans-1,3-Dichloropropene	10061-02-6	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Trichloroethene	79-01-6	< 2.0	n/a	ug/Kg	12/20/04			U
BLANK	Vinyl chloride	75-01-4	< 2.0	n/a	ug/Kg	12/20/04			U
LCS	1,1-Dichloroethene	75-35-4	24.380	97.500	% Recov	12/20/04	70.000	130.000	
LCS	Benzene	71-43-2	27.130	109.000	% Recov	12/20/04	70.000	130.000	
LCS	4-Bromofluorobenzene	460-00-4	50.850	102.000	% Recov	12/20/04	71.000	125.000	
LCS	Chlorobenzene	108-90-7	28.470	114.000	% Recov	12/20/04	70.000	130.000	
LCS	1,2-Dichloroethane-d4	17060-07-0	59.680	119.000	% Recov	12/20/04	80.000	134.000	
LCS	Toluene-d8	2037-26-5	54.090	108.000	% Recov	12/20/04	80.000	126.000	
LCS	Toluene	108-88-3	27.430	110.000	% Recov	12/20/04	70.000	130.000	
LCS	Trichloroethene	79-01-6	27.250	109.000	% Recov	12/20/04	70.000	130.000	

WSCF

ANALYTICAL RESULTS REPORT

Attention:
Project:

Steve Trent
F04-015: F04-015

Group #: WSCF20042399

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Result	Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ							
Radiochemistry													
W040002599	B19942	TRENT	14596-10-2	Americium-241	SOIL	LA-508-471	0.0430	pCi/g	1.00	0.015	01/06/05	12/14/04	
W040002599	B19942	TRENT	E,T,C	Am-241 by AEA Total Cntg Error	SOIL	LA-508-471	+ -	0.020	pCi/g	1.00	0.0	01/06/05	12/14/04
W040002599	B19942	TRENT	10198-40-0	Cobalt-60	SOIL	LA-508-481		0.0113	pCi/g	1.00	0.012	12/22/04	12/14/04
W040002599	B19942	TRENT	E,T,C	Co-60 Rel. Count Error (GEA)	SOIL	LA-508-481	+ -	0.012	pCi/g	1.00	0.0	12/22/04	12/14/04
W040002599	B19942	TRENT	10045-97-3	Cesium-137	SOIL	LA-508-481	U	-1.21e-03	pCi/g	1.00	0.011	12/22/04	12/14/04
W040002599	B19942	TRENT	E,T,C	Cs-137 Rel. Count Error (GEA)	SOIL	LA-508-481	+ -	6.9e-03	pCi/g	1.00	0.0	12/22/04	12/14/04
W040002599	B19942	TRENT	14683-23-9	Europium-152	SOIL	LA-508-481	U	-0.0216	pCi/g	1.00	0.030	12/22/04	12/14/04
W040002599	B19942	TRENT	E,T,C	Eu-152 Rel. Count Error (GEA)	SOIL	LA-508-481	+ -	0.024	pCi/g	1.00	0.0	12/22/04	12/14/04
W040002599	B19942	TRENT	15585-10-1	Europium-154	SOIL	LA-508-481	U	-6.07e-03	pCi/g	1.00	0.036	12/22/04	12/14/04
W040002599	B19942	TRENT	E,T,C	Eu-154 Rel. Count Error (GEA)	SOIL	LA-508-481	+ -	0.021	pCi/g	1.00	0.0	12/22/04	12/14/04
W040002599	B19942	TRENT	14391-16-3	Europium-155	SOIL	LA-508-481	U	0.0340	pCi/g	1.00	0.040	12/22/04	12/14/04
W040002599	B19942	TRENT	E,T,C	Eu-155 Rel. Count Error (GEA)	SOIL	LA-508-481	+ -	0.035	pCi/g	1.00	0.0	12/22/04	12/14/04
W040002599	B19942	TRENT	13981-16-3	Plutonium-238	SOIL	LA-508-471	U	-7.80e-03	pCi/g	1.00	0.061	01/07/05	12/14/04
W040002599	B19942	TRENT	E,T,C	Pu-238 by AEA Total Cntg Error	SOIL	LA-508-471	+ -	0.033	pCi/g	1.00	0.0	01/07/05	12/14/04
W040002599	B19942	TRENT	PU-239/240	Pu-239/240 by AEA	SOIL	LA-508-471	U	-2.00e-03	pCi/g	1.00	0.018	01/07/05	12/14/04
W040002599	B19942	TRENT	E,T,C	Pu-239/240 AEA Total Cntg Err	SOIL	LA-508-471	+ -	7.0e-03	pCi/g	1.00	0.0	01/07/05	12/14/04
W040002599	B19942	TRENT	SR-RAD	Strontium-89/90	SOIL	LA-508-415		0.230	pCi/g	1.00	0.21	12/29/04	12/14/04
W040002599	B19942	TRENT	E,T,C	Sr-89/90 Rel. Count Error	SOIL	LA-508-415	+ -	0.49	pCi/g	1.00	0.0	12/29/04	12/14/04
W040002599	B19942	TRENT	U-233/234	Uranium-233/234	SOIL	LA-508-471		0.170	pCi/g	1.00	4.6e-03	01/06/05	12/14/04
W040002599	B19942	TRENT	E,T,C	U-233/234 AEA Total Cntg Error	SOIL	LA-508-471	+ -	0.049	pCi/g	1.00	0.0	01/06/05	12/14/04
W040002599	B19942	TRENT	15117-96-1	Uranium-235	SOIL	LA-508-471		0.0100	pCi/g	1.00	5.6e-03	01/06/05	12/14/04
W040002599	B19942	TRENT	E,T,C	U-235 by AEA Total Cntg Error	SOIL	LA-508-471	+ -	9.2e-03	pCi/g	1.00	0.0	01/06/05	12/14/04
W040002599	B19942	TRENT	U-238	Uranium-238	SOIL	LA-508-471		0.140	pCi/g	1.00	4.6e-03	01/06/05	12/14/04
W040002599	B19942	TRENT	E,T,C	U-238 by AEA Total Cntg Error	SOIL	LA-508-471	+ -	0.043	pCi/g	1.00	0.10	01/06/05	12/14/04

MDL=Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

U - Analyzed for but not detected above limiting criteria.

RQ=Result Qualifier

DF=Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

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Groundwater Remediation Program

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WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: Americium by AEA

SAF Number: NA
 Sample Date: 11/24/04
 Receive Date: 12/13/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W040002592									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Americium-241	14596-10-2	3.4e-02	38.596	RPD	01/06/05	0.000	20.000	*
BATCH QC									
BLANK	Americium-241	14596-10-2	6.9e-02	0.069	pCi/g	01/06/05	-10.000	1000.000	
LCS	Americium-241	14596-10-2	43.74	90.936	% Recov	01/06/05	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399

Matrix: SOLID

Test: Gamma Energy Analysis-grd H₂O

SAF Number: NA

Sample Date: 12/14/04

Receive Date: 12/14/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002599

BATCH QC ASSOCIATED WITH SAMPLE

DUP	Cobalt-60	10198-40-0	U1.54e-02	n/a	RPD	12/27/04	0.000	20.000	
DUP	Cesium-137	10045-97-3	U6.04e-04	n/a	RPD	12/27/04	0.000	20.000	
DUP	Europium-152	14683-23-9	U-2.80e-2	n/a	RPD	12/27/04	0.000	20.000	
DUP	Europium-154	15585-10-1	U-2.08e-2	n/a	RPD	12/27/04	0.000	20.000	
DUP	Europium-155	14391-16-3	U3.79e-02	n/a	RPD	12/27/04	0.000	20.000	

BATCH QC

BLANK	Cobalt-60	10198-40-0	U1.43e-3	n/a	pCi/g	12/22/04	-10.000	1000.000	
BLANK	Cesium-137	10045-97-3	U1.13e-3	n/a	pCi/g	12/22/04	-10.000	1000.000	
BLANK	Europium-152	14683-23-9	U-2.1e-2	n/a	pCi/g	12/22/04	-10.000	1000.000	
BLANK	Europium-154	15585-10-1	U-1.0e-2	n/a	pCi/g	12/22/04	-10.000	1000.000	
BLANK	Europium-155	14391-16-3	U-1.6e-2	n/a	pCi/g	12/22/04	-10.000	1000.000	
LCS	Cobalt-60	10198-40-0	4.28e +03	102.148	% Recov	12/21/04	80.000	120.000	
LCS	Cesium-137	10045-97-3	3.91e +03	109.218	% Recov	12/21/04	80.000	120.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: Plutonium Isotopes by AEA

SAF Number: NA
 Sample Date: 11/24/04
 Receive Date: 12/13/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002592

BATCH QC ASSOCIATED WITH SAMPLE

DUP	Pu-239/240 by AEA	PU-239/240	1.5e-02	n/a	RPD	01/07/05	0.000	20.000	
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BATCH QC

BLANK	Pu-239/240 by AEA	PU-239/240	U9.0e-03	n/a	pCi/g	01/07/05	-10.000	1000.000	
LCS	Pu-239/240 by AEA	PU-239/240	4.8e+01	97.561	% Recov	01/07/05	75.000	125.000	

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: Strontium 89/90

SAF Number: NA
 Sample Date: 11/24/04
 Receive Date: 12/13/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
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Lab ID: W040002592

BATCH QC ASSOCIATED WITH SAMPLE

DUP	Strontium-89/90	SR-RAD	U-2.6E-01	n/a	RPD	12/29/04	0.000	20.000
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BATCH QC

BLANK	Strontium-89/90	10098-97-2	9.7e-02	0.097	pCi/g	12/29/04	-10.000	300.000
LCS	Strontium-89/90	10098-97-2	68.8	96.765	% Recov	12/29/04	80.000	120.000

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F04-015

Group #: WSCF20042399

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		<p>PCB: Low recoveries of the surrogate tetra-chloro-m-xylene (TCX) are due to evaporation of TCX during excessive blowdown concentration. TCX is much more volatile than Aroclor PCBs or DCB surrogate. DCB and Aroclor recoveries are normal in all samples, LCS, and matrix spikes demonstrating that Aroclor PCBs if present are not lost even with excessive blowdown concentration. cg</p> <p>ORGANICS: Sample concentrations are corrected for moisture and reported as dry weight basis. gar</p> <p>ICP-MS: Prep blank evaluated, no affect on sample data. Mercury LCS biase high, sample results >MDL E flag All other LCS results within Manufacturer's specifications</p> <p>Am241 duplicate is flagged but the sample activity is low level so the RPD does not apply.lmh</p>

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent **Group #:** WSCF20042399
Project Number F04-015 :F04-015

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error			13	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	PB-212 Count Error			14	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	PB-214 Count Error			15	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	AC-228 Count Error			17	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	RA-228 Count Error			17	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error			17	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	RA-226 Count Error			17	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	TL-208 Count Error			17	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	SN-126 Count Error			26	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	BI-212 Count Error			29	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	TH-234 Count Error			32	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	CS-134 Count Error			38	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	U-235 Count Error			39	%
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	CS-134			0.025	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	SN-126			0.12	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	TL-208			0.16	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	BI-212			0.39	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	BI-214			0.42	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	PB-214			0.42	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	RA-226			0.42	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	PB-212			0.55	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	AC-228			0.55	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	RA-228			0.55	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	TH-234			0.59	pCi/g
W040002599	B19942	TRENT	Gamma Energy Analysis-grd H2O	K-40			12	pCi/g

RQ=Result Qualifier

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Groundwater Remediation Program

WGPP v 1.1 Report #: 20042399

Report Date: 18-jan-2005

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WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20042399
 Matrix: SOLID
 Test: Uranium Isotopes by AEA

SAF Number: NA
 Sample Date: 11/24/04
 Receive Date: 12/13/04

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Analysis Date	Lower Limit	Upper Limit	RQ
Lab ID: W040002592									
BATCH QC ASSOCIATED WITH SAMPLE									
DUP	Uranium-238	U-238	1.8e+00	11.765	RPD	01/06/05	0.000	20.000	
BATCH QC									
BLANK	Uranium-238	24678-82-8	1.6e-02	0.016	pCi/g	01/06/05	-10.000	1000.000	
LCS	Uranium-238	24678-82-8	8.8e+01	116.064	% Recov	01/06/05	75.000	125.000	

WSCF
TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number F04-015 :F04-015

Group #: WSCF20042399

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W040002599	B19942	TRENT	SW-846 8270B Semi-Vols	SMP 14.635 Di-n-butylphthalate	84-74-2	14.63591	2.4e +02	ug/kg

RQ=Result Qualifier

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Groundwater Remediation Program

WGPPE v 1.1 Report# 20042399

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WSCF

METHOD REFERENCES REPORT

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-212-411	Determination of Soil pH Measurement EPA SW-846 9045C	SOIL AND WASTE pH
LA-505-412	LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY EPA-600/R-94-111 200.8	DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS
LA-508-415	LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS None	No reference to any industry method.
LA-508-471	LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP None	No reference to any industry method.
LA-508-481	LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE None	No reference to any industry method.
LA-519-412	LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C EPA-600/4-79-020 160.3 Standard Methods 2540B	RESIDUE, TOTAL Total Solids Dried at 103-105 C
LA-523-427	LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY EPA SW-846 3510C EPA SW-846 3545 EPA SW-846 3665A EPA SW-846 8000B EPA SW-846 8082	SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION PRESSURIZED FLUID EXTRACTION (PFE) SULFURIC ACID/PERMANGANATE CLEANUP DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at
<\\ap006\aspdocs\WSCF\Sample Mgmt\ProcedureMethodCrossReference.pdf>. This document includes on-line
links to full-text versions of the procedures and methods, where available.

WSCF

METHOD REFERENCES REPORT

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-523-443	LA-523-443: GAS CHROMATOGRAPH ANALYSIS OF GASOLINE RANGE TOTAL PETROLEUM HYDROCARBONS WDOE TPH NWTPH-G	Volatile Petroleum Products Method for Soil and Water
LA-523-455	LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846 EPA SW-846 8000B EPA SW-846 8260B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
LA-523-456	LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C EPA SW-846 8000B EPA SW-846 8270C	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
LA-533-410	LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY EPA-600/R-94-111 300	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY
LA-695-402	LA-695-402: DETERMINATION OF CYANIDE BY MIDIDISTILLATION AND SPECTROPHOTOMETRIC EPA-600/4-79-020 335.2	Cyanide, Total
NWTPH	NWTPH-Diesel and/or Gasoline WDOE NWTPH-Dx/Gx	Total Petroleum Hydrocarbons - Diesel/Gasoline

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at
\\ap006\aspdocs\WSCF\Sample Mgmt\ProcedureMethodCrossReference.pdf. This document includes on-line
links to full-text versions of the procedures and methods, where available.

W13q Worklist/Batch/QC Report for Group# WSCF20042399

WL#	S#	Batch	QC#	Tray	Type	Sample#	Test
				SAMPLE		W040002599	Percent Solids
				SAMPLE		W040002599	pH Soil and Waste Measurement
			28092	BLANK			Cyanide by Midi/Spectrophotom
			28092	BLNK-PREP			Cyanide by Midi/Spectrophotom
			28092	LCS			Cyanide by Midi/Spectrophotom
			28092	MS		W040002581	Cyanide by Midi/Spectrophotom
			28092	MSD		W040002581	Cyanide by Midi/Spectrophotom
			28092	SPK-RPD		W040002581	Cyanide by Midi/Spectrophotom
			28092	SAMPLE		W040002599	Cyanide by Midi/Spectrophotom
24521	1	24879	28166	BLANK			ICP-2008 MS All possible metal
24521	2	24879	28166	LCS			ICP-2008 MS All possible metal
24521	17	24879	28166	MS		W040002599	ICP-2008 MS All possible metal
24521	18	24879	28166	MSD		W040002599	ICP-2008 MS All possible metal
24521	16	24879	28166	SAMPLE		W040002599	ICP-2008 MS All possible metal
24521	4	24879	28166	MS		W040002619	ICP-2008 MS All possible metal
24521	5	24879	28166	MSD		W040002619	ICP-2008 MS All possible metal
24521	12	24879	28166	MS		W040002681	ICP-2008 MS All possible metal
24521	13	24879	28166	MSD		W040002681	ICP-2008 MS All possible metal
24521	0	24879	28166	SPK-RPD		W040002681	ICP-2008 MS All possible metal
			28176	BLANK			WTPH-D TPH Diesel Range (Wa)
			28176	LCS			WTPH-D TPH Diesel Range (Wa)
			28176	MS		W040002582	WTPH-D TPH Diesel Range (Wa)
			28176	MSD		W040002582	WTPH-D TPH Diesel Range (Wa)
			28176	SPK-RPD		W040002582	WTPH-D TPH Diesel Range (Wa)
			28176	SAMPLE		W040002599	WTPH-D TPH Diesel Range (Wa)
			28176	SURR		W040002599	WTPH-D TPH Diesel Range (Wa)
			28210	BLANK			PCBs complete list
			28210	LCS		W040002532	PCBs complete list
			28210	MS		W040002532	PCBs complete list
			28210	MSD		W040002532	PCBs complete list
			28210	SPK-RPD		W040002532	PCBs complete list
			28210	SAMPLE		W040002599	PCBs complete list
			28210	SURR		W040002599	PCBs complete list
			28222	BLANK			SW-846 8270B Semi-Vols
			28222	LCS			SW-846 8270B Semi-Vols
			28222	MS		W040002582	SW-846 8270B Semi-Vols
			28222	MSD		W040002582	SW-846 8270B Semi-Vols
			28222	SPK-RPD		W040002582	SW-846 8270B Semi-Vols
			28222	SAMPLE		W040002599	SW-846 8270B Semi-Vols
			28222	SURR		W040002599	SW-846 8270B Semi-Vols
24493	1	24851	28230	BLANK			Strontium 89/90
24493	2	24851	28230	LCS			Strontium 89/90
24493	3	24851	28230	DUP		W040002592	Strontium 89/90
24493	7	24851	28230	SAMPLE		W040002599	Strontium 89/90
24423	1	24778	28248	BLANK			Gamma Energy Analysis-grd H2O
24423	2	24778	28248	LCS			Gamma Energy Analysis-grd H2O
24423	3	24778	28248	DUP		W040002599	Gamma Energy Analysis-grd H2O

24423	4	24778	28248	SAMPLE	W040002599	Gamma Energy Analysis-grd H2O
24624	2	24980	28311	BLANK		Anions by Ion Chromatography
24624	13	24980	28311	BLANK		Anions by Ion Chromatography
24624	17	24980	28311	BLANK		Anions by Ion Chromatography
24624	3	24980	28311	LCS		Anions by Ion Chromatography
24624	12	24980	28311	LCS		Anions by Ion Chromatography
24624	14	24980	28311	SAMPLE	W040002599	Anions by Ion Chromatography
24624	5	24980	28311	DUP	W040002744	Anions by Ion Chromatography
24624	6	24980	28311	MS	W040002744	Anions by Ion Chromatography
24624	7	24980	28311	MSD	W040002744	Anions by Ion Chromatography
24637	1	24995	28347	BLANK		Uranium Isotopics by AEA
24637	2	24995	28347	LCS		Uranium Isotopics by AEA
24637	3	24995	28347	DUP	W040002592	Uranium Isotopics by AEA
24637	7	24995	28347	SAMPLE	W040002599	Uranium Isotopics by AEA
24638	1	24994	28355	BLANK		Americium by AEA
24638	2	24994	28355	LCS		Americium by AEA
24638	3	24994	28355	DUP	W040002592	Americium by AEA
24638	7	24994	28355	SAMPLE	W040002599	Americium by AEA
24639	1	24993	28356	BLANK		Plutonium Isotopics by AEA
24639	2	24993	28356	LCS		Plutonium Isotopics by AEA
24639	3	24993	28356	DUP	W040002592	Plutonium Isotopics by AEA
24639	7	24993	28356	SAMPLE	W040002599	Plutonium Isotopics by AEA
			28376	BLANK		VOA Ground Water Protection
			28376	LCS		VOA Ground Water Protection
			28376	MS	W040002585	VOA Ground Water Protection
			28376	MSD	W040002585	VOA Ground Water Protection
			28376	SPK-RPD	W040002585	VOA Ground Water Protection
			28376	SAMPLE	W040002599	VOA Ground Water Protection
			28376	SURR	W040002599	VOA Ground Water Protection
24729	1	25087	28429	BLANK		NWTPH-GX TPH Gasoline Range
24729	2	25087	28429	LCS		NWTPH-GX TPH Gasoline Range
24729	3	25087	28429	SAMPLE	W040002599	NWTPH-GX TPH Gasoline Range
24729	4	25087	28429	DUP	W040002627	NWTPH-GX TPH Gasoline Range
24729	5	25087	28429	MS	W040002627	NWTPH-GX TPH Gasoline Range
24729	6	25087	28429	MSD	W040002627	NWTPH-GX TPH Gasoline Range
24729	6	25087	28429	SPK-RPD	W040002627	NWTPH-GX TPH Gasoline Range

M8141-SLF-05-041

ATTACHMENT 3

SAMPLE RECEIPT INFORMATION

Consisting of 3 pages
Including cover page

1/13/05

Waste Sampling and Characterization Facility
 P.O. BOX 1970 S3-30, Richland, WA 99352
 PHONE: (509) 373-7004/FAX: (509) 373-7134

ACKNOWLEDGMENT OF SAMPLES RECEIVED

D/B/KB

Groundwater Remediation Program

Richland, WA 99354
 Attn: Steve Trent

Customer Code: GPP
 PO#: 119144/ES10
 Group#: 20042399
 Project#: F04-015
 Proj Mgr: Steve Trent A0-21
 Phone: 373-5869

The following samples were received from you on 12/14/04. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Matrix	Sample Date
Tests Scheduled			
W040002599	B19942	TRENT @2008 @AEA-30 @AEA-31 @AEA-32 @GEA-GPP @IC-30 @PCBGPP @SR89_90 @SVOCGPP @TPHD-WA @TPHG @VOA-GPP CN-02 PERSOLID PH-30	Solid, or handle as if solid 12/14/04

Test Acronym Description

Test Acronym	Description
@2008	ICP-2008 MS All possible metal
@AEA-30	Plutonium Isotopes by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopes by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@IC-30	Anions by Ion Chromatography
@PCBGPP	PCBs complete list
@SR89_90	Strontium 89/90
@SVOCGPP	SW-846 8270B Semi-Vols
@TPHD-WA	WTPh-D TPH Diesel Range (Wa)
@TPHG-WA	NWTPH-GX TPH Gasoline Range
@VOA-GPP	VOA Ground Water Protection
CN-02	Cyanide by Midi/Spectrophotom
PERSOLID	Percent Solids
PH-30	pH Soil and Waste Measurement

FLUOR Hanford Inc.	113	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST					F04-015-047	PAGE 1 OF 1
COLLECTOR Pope/Pfister/Tyra/Wiberg	COMPANY CONTACT CS Gearlock 372-9638			PROJECT COORDINATOR TRENT, SJ		PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days	
SAMPLING LOCATION 216-U-3; 35FT-37.5FT	PROJECT DESIGNATION 200-MW-1 Characterization Sampling and Analysis - Soil			SAF NO. F04-015		AIR QUALITY		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-386 1		COA 119144ES10	METHOD OF SHIPMENT Government Vehicle				
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO. N/A				

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS N/A Z004 Z399	PRESERVATION	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None			
		TYPE OF CONTAINER	aG	aG	aG	aGs*	aG	Square Bottle - Poly			
		NO. OF CONTAINER(S)	1	1	1	3	1	1			
SPECIAL HANDLING AND/OR STORAGE Radioactive Tie To: B19953		SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	PCBs - 8082;	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	SEE ITEM (5) IN SPECIAL INSTRUCTIONS			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B19942	SOIL	12/14/04	0700	X	X	X	X	X	X		
		W040002599									

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM R. PESTER/Parff	DATE/TIME 12/14/04 0748	RECEIVED BY/STORED IN SPB	DATE/TIME 12/14/04 0748	** The laboratory is to report both kerosene and diesel range compounds from the WTPH-D analysis.	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	(1)IC Anions - 300.0 {Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate} Total Cyanide - 9010; pH (Soil) - 9045;	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	(2)ICP/MS - 200.8 (TAL) {Cadmium, Chromium, Copper, Silver} ICP/MS - 200.8 (Add-On) {Lead, Uranium} 200.8_HG - ICPMS {Mercury};	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	(3)VOA - 8260A (TCL); VOA - 8260A (Add-On) {1-Butanol, cis-1,2-Dichloroethylene, n-Butylbenzene, trans-1,2-Dichloroethylene}	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	(4)Semi-VOA - 8270A (Add-On) {Tributyl phosphate} TPH-Gasoline Range - WTPH-G; TPH-Diesel Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	(5)Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Isotopic Plutonium; Isotopic Uranium; Americium-241; Strontium-89,90 -- Total Sr;	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME